REPORT

SDMS DocID 248132

Preliminary Building Cleanup Alternatives Evaluation

Aerovox, Inc. Facility
New Bedford, Massachusetts

December 1997

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

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Transmitted Via Federal Express

February 24, 1998

Mr. Colburn T. Cherney
Ropes & Gray
One Franklin Square
1301 K Street, N.W.
Suite 800 East
Washington, D.C. 20005-3333

Re: Aerovox, Inc. Facility
New Bedford, Massachusetts
Project #: 1638.03855 #2

Dear Mr. Cherney:

Please find enclosed eight copies of the Building Cleanup Alternatives Report for the Aerovox, Inc. Facility in New Bedford, Massachusetts.

Please feel free to contact me at (315) 446-9120 if you have any questions regarding the enclosed report.

Sincerely,

BLASLAND, BOUCK & LEE, INC.

David J. Ulm
Vice President

FJK/bmb
Enclosure
27881369.WPD

cc: Edward R. Lynch, P.E., Blasland, Bouck & Lee, Inc.

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TECHNICAL REPORT

Preliminary Building Cleanup Alternatives Evaluation

Aerovox, Inc. Facility
New Bedford, Massachusetts

December, 1997

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

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Table of Contents

Section 1

Introduction

1. Introduction

1.1 General

This report presents a preliminary evaluation of Building Cleanup Alternatives for the Aerovox, Inc. (Aerovox) facility located in New Bedford, Massachusetts. The Aerovox facility consists of one three-story building currently used to manufacture capacitors and related products. To facilitate a decision regarding the future disposition of the building, this report presents a technical description of and cost estimates for the following two alternatives:

- Building Cleanup Alternative A (Removal of TSCA-Regulated Materials); and
- Building Cleanup Alternative B (Encapsulation of TSCA-Regulated Materials).

1.2 Purpose and Scope

The purpose of this report is to provide Aerovox with basic cost and technical information to facilitate a decision regarding the potential continued use of the existing building. The evaluation considers above grade building materials and does not incorporate concerns, if any, with below grade utilities, soils, or ground water.

This report is organized into four sections. Section 1 presents general information, the purpose and scope of the report, and relevant background information including a summary of previous sampling events. Section 2 presents a summary of PCB Building Material Investigations conducted by BBL, along with a description of preliminary surface cleaning pilot studies. Section 3 presents a preliminary evaluation of the two Building Cleanup Alternatives. Section 4 presents cost information relative to each alternative.

1.3 Background Information

The Aerovox facility building encompasses approximately 450,000 square feet and consists of a western section that contains two floors and an eastern section that contains three floors. The exterior walls of the building are brick while the roof is constructed of wood. The first floor in the western section is partially underground and consists of a concrete floor and concrete walls that extend to the surrounding grade. The first floor in the eastern section consists of concrete. Approximately one-third of the eastern portion of the building (the one-third nearest the western section) is also partially below surrounding grade. Structural components of the building include interior wood columns and steel I-beam floor joists. Wooden floors are present on the second and third floors of the eastern section, and in a portion of the second floor of the western section.

A soil and ground-water PCB investigation and remedial alternatives evaluation was completed in the mid-1980's. Exterior PCB-impacted soil was remediated via the installation of an asphalt cap. In June 1997, the United States Environmental Protection Agency (USEPA) conducted an inspection of the Aerovox building and collected 20 wood shaving samples from the floor of the capacitor impregnation tank room and collected oil samples from various oil storage tanks/degreaser operations for PCB analysis. The USEPA data indicated the presence of PCBs in the wood floor samples above 50 parts per million (ppm). PCBs were not detected above laboratory detection limits in the oil samples collected from tanks/equipment at the Aerovox facility. In October 1997, USEPA returned to the facility and collected 93 standard wipe samples for PCB analysis. Aerovox collected a number of split wipe samples along with USEPA. The analytical results indicated the presence of PCBs at concentrations greater than 10 micrograms (ug)/100 centimeters squared (cm^2) which is the Toxic Substance Control Act (TSCA) PCB Spill Policy cleanup concentration for low- and high-contact interior surfaces. Figure 1 presents the sample results from USEPA's June 1997 sampling event and Figure 2 presents the wipe sample results from the October 1997 wipe sampling event.

Section 2

PCB Building Material/Equipment Investigation

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2. PCB Building Material/Equipment Investigation

2.1 General

This section presents a description of the PCB Building Material/Equipment Investigation conducted by BBL on November 24 and 25, 1997. The purpose of the PCB Building Material/Equipment Investigation was to supplement the existing PCB data base, to determine the approximate extent of impacted building materials, and to develop information regarding the approximate quantities of building materials. In addition, BBL conducted a pilot study activities to determine the effectiveness of surficial washing as a means of reducing PCB concentrations on non-porous surfaces. The remainder of this section presents a description of the PCB Building Material/Equipment Investigation activities and the results of the investigation.

2.2 Description of PCB Building Material/Equipment Investigation

The PCB Building Material/Equipment Investigation consisted of the following activities:

- The collection of 17 full-core building material samples (wood, brick, and concrete) for PCB analysis;
- The collection of 12 composite scrape samples of dust/dirt from elevated horizontal surfaces for PCB analysis;
- The collection of 18 standard wipe samples from non-porous building material surfaces (tile floor, painted walls, steel surfaces, etc.) for PCB analysis;
- The collection of 13 standard wipe samples from the non-porous surfaces of select equipment for PCB analysis; and
- The performance of a surficial cleaning method pilot study.

Sample locations were chosen to provide information regarding PCB concentrations in and on building materials that were not sampled previously. In addition, a select number of sample locations were chosen to correlate to previous sample locations to confirm the previous data.

The PCB samples were containerized and shipped under chain of custody procedures to our laboratory subcontractor, Galson Laboratories, located in Syracuse, New York. Each sample was analyzed for PCBs using USEPA Method 8082. Sample locations were tied to existing structures (i.e., columns, walls, etc.) and noted in the field log book.

In addition, BBL conducted a visual reconnaissance of the building to determine the following:

- Sizes and dimensions of existing building components including exterior and interior walls, floors, the roof, steel joints, and wood columns;
- The approximate amount of non-porous surfaces and porous surfaces;
- The approximate number of equipment pieces; and
- The presence of potential asbestos-containing materials.

The results of the visual reconnaissance activities have been used to determine the approximate volume and weight of existing building components and non-porous surfaces in order to prepare cost estimates for the building cleanup alternatives, discussed below in sections 3 and 4.

The results of the PCB Building Material Investigation, the surficial cleaning pilot study, and the equipment PCB wipe sampling activities are presented below.

2.3 PCB Building Material Investigation Results

Table 1 presents the analytical result for each full core sample and each dust/dirt scrape sample along with the sample identification number and building material type (wood, concrete, etc.).

Table 2 presents the analytical results for wipe samples. The location of each sample along with the associated PCB analytical result is shown on Figure 2.

Full Core Samples

The analytical results indicate that the wood floor on the second and third floor of the eastern section of the building contains PCBs at concentrations greater than 50 ppm. Two of the three wood floor full core samples (i.e., samples 2-FC-4 and 2-FC-5) collected from the second floor in the western section of the building contained PCBs greater than 50 ppm. One of the two concrete floor full core samples collected from the second floor in the western section of the building contained PCBs greater than 50 ppm.

The analytical results indicate that PCBs were detected in full core samples collected from the brick exterior walls at concentrations ranging from 2.48 ppm to 26.4 ppm. The one full core wood ceiling sample collected from the second floor ceiling in the western section of the building contained PCBs at a concentration of 28.3 ppm.

Dust and Dirt Samples

Each of the 12 dust and dirt scrape samples contained PCBs at concentrations greater than 50 ppm.

Wipe Samples

Seventeen of the 18 wipe samples collected from non-porous building materials and non-porous appurtances (electrical conduits and light fixtures) contained PCBs at concentrations greater than the TSCA Spill Cleanup Policy cleanup level of 10 ug/100 cm^2 for high- and low-contact surfaces.

2.4 Surface Cleaning Pilot Study Results

BBL conducted two surficial cleaning pilot studies at the Aerovox facility in order to determine the effectiveness of surficial washing as a means of reducing PCB concentrations on non-porous surfaces. Each pilot study was conducted utilizing the following procedure:

1) A pre-cleaning wipe sample was collected from the select non-porous surface;

2) In an immediately adjacent location, the surface was cleaned using rags and a spray-on detergent (Knight's Super Spray Clean); and

3) Immediately following cleaning, a post-clean wipe sample was collected.

The first pilot study was conducted on the horizontal surface of a ceiling steel I-beam located on the first floor in the western section of the building near the lower pump room. The results of the first pilot study are as shown below.

Pre-Cleaning Wipe Sample	Post-Cleaning Wipe Sample
1-PSW-1	1-PSW-1A
Result: 520 ug/100 cm^2	Result: 226 ug/100 cm^2

The second pilot study was conducted on the steel diagonal plate floor covering located at the second floor receiving dock in the eastern section of the building. The results of the second pilot study are as shown below.

Pre-Cleaning Wipe Sample	Post-Cleaning Wipe Sample
2-PSW-1	2-PSW-1A
Result: 163 ug/100 cm^2	Result: 34 ug/100 cm^2

The results of the pilot studies indicate that a one-time surficial detergent washing did not achieve the TSCA PCB spill cleanup level of 10 ug/100 cm^2. Additional detergent washing will likely be required to accomplish the following:

a. Determine how many washes it will take to achieve the cleanup objective; and

b. Determine what PCB concentration can be achieved with a reasonable number of surface washes (i.e., three times).

The second pilot study results indicate that detergent washing may achieve a non-porous surface PCB concentration of less than 100 ug/100 cm^2 which is the typical cleanup requirement for steel prior to disposal (smelting) acceptance at a steel recycling facility.

2.5 PCB Equipment Investigation Results

Ten of the 13 wipe samples collected from the surfaces of equipment at the Aerovox facility contained PCBs at concentrations greater than 10 ug/100 cm^2.

Section 3

Building Cleanup Alternatives

3. Building Cleanup Alternatives

3.1 General

This section presents a description of the two building cleanup alternatives developed by BBL based on the analytical data generated to date and based on our past experience with building remediation. BBL has developed the following building cleanup alternatives:

- Building Cleanup Alternative A (Removal of TSCA-Regulated Materials); and
- Building Cleanup Alternative B (Encapsulation of TSCA-Regulated Materials).

A description of each building cleanup alternative is presented below.

3.2 Building Cleanup Alternative A (Removal of TSCA Regulated Materials)

Under this alternative, the building would be remediated to agreed upon cleanup levels for continued use. For cost estimating purposes, we have assumed that the PCB cleanup levels would be as follows:

- Porous materials: remove materials that contain greater than 50 ppm PCBs on a full core sample basis and encapsulate porous materials that contain less than 50 ppm PCBs; and

- Non-porous surfaces: 10 ug/100 cm^2.

This alternative would consist of the major work activities listed below.

Work Activity 1 - Interior Cleaning
Work Activity 2 - Post-Cleaning Verification Sampling
Work Activity 3 - TSCA Material Removal
Work Activity 4 - Restoration Program

These work activities are discussed below.

Work Activity 1 - Interior Cleaning

This work activity would consist of cleaning interior non-porous surfaces (steel, painted brick and wood, etc.) to reduce the surficial PCB concentrations to less than the TSCA PCB spill cleanup criteria of 10 ug/100 cm^2 for high- and low contact interior surfaces. Because the preliminary pilot studies indicated that a single detergent wash may not reduce PCB concentrations to less than 10 ug/100 cm^2, a higher unit cost (compared with the unit cost used in the demolition alternative) for cleaning (via triple handwashing) the interior surfaces has been used to estimate the cost of this work activity. Additional pilot studies would be required to confirm that a surficial cleanup level of 10 ug/100 cm^2 can be achieved. This work activity would also address the dust and dirt that contains PCBs at concentrations greater than 50 ppm.

In addition, as part of this work activity, the surfaces of equipment that contain PCBs at concentrations greater than 10 ug/100 cm^2 would be cleaned.

Work Activity 2 - Post Cleaning Verification Sampling

Upon completion of the interior surface and equipment cleaning activities, post-cleaning verification wipe samples would be collected and analyzed to verify that the interior, non-porous surfaces and equipment surfaces do not contain PCBs at concentrations greater than 10 ug/100 cm^2.

Work Activity 3 - TSCA Material Removal

Under this work activity, the wood floors in the eastern section of the building and concrete (located on the second floor of the western section surrounding sample 2-FC-8) that contain PCBs at concentrations greater than 50 ppm would be removed and disposed of at a TSCA landfill. The unit costs for the removal of TSCA-regulated materials is higher under this alternative versus the demolition alternative because additional activities including dust control, protection of equipment on lower floors, and temporary relocation of utilities that run along the ceilings beneath the impacted floors would need to be conducted. As with the building demolition alternative, BBL has assumed that the floors can be removed without jeopardizing the structural stability of the building. A more comprehensive structural evaluation should be conducted to confirm that the impacted wood and concrete flooring can be removed without jeopardizing the structural stability of the building. Consistent with the logic for this building cleanup alternative which includes removal of TSCA-regulated building materials, this alternative would also involve the removal and off-site disposal of the concrete floor slab associated with the first floor of the western section of the building. Although no full core samples were collected from this concrete floor slab, the floor slab in the building section of the building most likely contains PCBs at regulated concentrations.

Work Activity 4 - Restoration Program

The wood and concrete floors that were removed would be replaced to facilitate continued use of the building. The cost estimate for this alternative includes replacement of approximately 260,800-square-feet of wood flooring and replacement of approximately 15,000 square feet of concrete flooring. The cost estimate for this alternative does not include costs associated with lost production time due to performance of the building cleanup activities.

The restoration program would include the encapsulation of approximately 25,000-square-feet of concrete and wood flooring (second floor, western section) that contains PCBs at concentrations less than 50 ppm but greater than 10 ppm.

3.3 Building Cleanup Alternative B (Encapsulation of TSCA-Regulated Materials)

This alternative would consist of cleaning interior horizontal and vertical surfaces and encapsulation of TSCA regulated materials consisting of the impacted wood and concrete floors. This alternative would consist of the following major work activities listed below.

Work Activity 1 - Interior Cleaning
Work Activity 2 - Post-Cleaning Verification Sampling
Work Activity 3 - Encapsulation of TSCA Regulated Materials

The work activities are discussed below.

Work Activity 1 - Interior Cleaning

This work activity would consist of cleaning interior non-porous surfaces (steel, painted brick and wood, etc.) to reduce the surficial PCB concentrations to less than the TSCA PCB spill cleanup criteria of 10 ug/100 cm^2 for high- and low contact interior surfaces. Because the preliminary pilot studies indicated that a single detergent wash may not reduce PCB concentrations to less than 10 ug/100 cm^2, a higher unit cost (compared with the unit cost used in the detection alternative) for cleaning (via triple handwashing) the interior surfaces has been used to estimate the cost of this work activity. Additional pilot studies would be conducted to confirm that a surficial cleanup level of 10 ug/100 cm^2 can be achieved. This work activity would also address the dust and dirt that contains PCBs at concentrations greater than 50 ppm.

As part of this work activity, the surfaces of equipment that contain PCBs at concentrations greater than 10 ug/100 cm^2 would be cleaned.

Work Activity 2 - Post-Cleaning Verification Sampling

Upon completion of the interior surface and equipment cleaning activities, post-cleaning verification wipe samples would be collected and analyzed to verify that the interior non-porous surfaces and equipment surfaces do not contain PCBs at concentrations greater than 10 ug/100 cm^2.

Work Activity 3 - Encapsulation of TSCA-Regulated Materials

This work activity would consist of encapsulating the wood and concrete floors using two coats of epoxy-containing paint. Implementation of this alternative would require approval from USEPA Region 1 because TSCA-regulated materials would not be removed. The acceptability of this alternative by USEPA Region 1 is unknown. This alternative presents a greater future risk than the other alternatives as TSCA-regulated materials would still be present in the building increasing Aerovox's liability in case of a fire. In addition, under this alternative, when the building can no longer be used, the TSCA-regulated materials may still require off-site disposal in a TSCA landfill depending upon the regulations applicable at the time.

Section 4

Cost Estimate Summary

4. Cost Estimate Summary

4.1 General

This section presents a summary of the cost estimates for each Building Cleanup Alternative. The cost estimates are based on vendor quotes, past remedial costs, and BBL's experience with building cleanup projects. Major assumptions for each alternative are discussed below.

4.2 Cost Estimates for Building Cleanup Alternatives

Alternative	Estimated Cost
Building Cleanup Alternative A (Removal of TSCA-Regulated Materials)	$13,200,000.
Building Cleanup Alternative B (Encapsulation of TSCA-Regulated Materials)	$4,500,000.

Building Cleanup Alternative A (Removal of TSCA-Regulated Materials) Assumptions

The major assumptions that were made in developing the cost estimate for Building Cleanup Alternative A (Removal of TSCA-Regulated Materials) are listed below.

1) That interior surface cleaning techniques (triple handwash) can achieve the 10 ug/100 cm^2 cleanup goal. Based on the pilot study results, the cleanup goal for non-porous surfaces is not likely to be achieved for all non-porous surfaces.

2) That repeated rounds of verifications sampling and recleaning of interior surfaces will not be required.

3) That the wood flooring in the eastern section of the building and the impacted concrete flooring in the western section of the building can be removed without jeopardizing the structural stability of the building.

4) That the first floor slab in the western section of the building contains PCBs greater than 50 ppm and the floor slab in the eastern section of the building does not contain PCBs greater than 50 ppm.

Building Cleanup Alternative B (Encapsulation of TSCA-Regulated Materials) Assumptions

The major assumptions that were made in developing the cost estimate for Building Cleanup Alternative B (Encapsulation of TSCA-Regulated Materials) are listed below.

1) That interior surface cleaning techniques (triple handwash) can achieve the 10 ug/100 cm^2 cleanup goal. Based on the pilot study results, the cleanup goal for non-porous surfaces is not likely to be achieved for all non-porous surfaces.

2) That repeated rounds of verification sampling and recleaning of interior surfaces will not be required.

3) That encapsulation of building materials that contain PCBs at concentrations greater than 50 ppm will be acceptable to USEPA Region 1.

4) This alternative may not be acceptable to U.S. Environmental Protection Agency.

5) Future maintenance activities associated with this alternative could result in additional costs not included in cost estimate.

Tables

Table 1

Aerovox, Inc. Facility
New Bedford, Massachusetts

PCB Analytical Results
Full Core and Dust & Dirt Scrape Samples

Sample Type	Surface Material	Sample I.D.	PCBs Concentration[(1)] [ppm]
First Floor - Eastern Section			
Full Core	Brick Wall (painted)	1-WC-1	7.4
Scrape	Composite	1-DD-1	**880.0**
Scrape	Composite	1-DD-2	**121.0**
Scrape	Composite	1-DD-3	**420.0**
First Floor - Across Sections			
Scrape	Composite	1-DD-4	**2010.0**
Scrape	Composite	1-DD-5	**950.0**
Scrape	Composite	1-DD-6	**268.0**
Second Floor - Eastern Section			
Full Core	Wood floor (stained)	2-FC-1	**1,900.0**
Full Core	Wood floor (stained)	2-FC-2	**5,600.0**
Full Core	Wood floor (stained)	2-FC-3	**106.0**
Scrape	Composite	2-DD-3	**260.0**
Scrape	Composite	2-DD-4	**490.0**
Full Core	Brick wall (painted)	2-WC-3	8.0
Full Core	Brick wall (painted)	2-WC-4	2.5
Second Floor - Western Section			
Full Core	Wood floor (stained)	2-FC-4	**145.00**
Full Core	Wood floor (stained)	2-FC-5	**56,000.0**
Full Core	Wood floor (stained)	2-FC-6	28.0
Full Core	Concrete floor (stained)	2-FC-7	12.7
Full Core	Concrete floor (stained)	2-FC-8	**156.0**
Full Core	Ceiling beam (painted)	2-CC-1	28.3
Scrape	Composite	2-DD-1	**1,020.0**

Table 1

Aerovox, Inc. Facility
New Bedford, Massachusetts

PCB Analytical Results
Full Core and Dust & Dirt Scrape Samples

Sample Type	Surface Material	Sample I.D.	PCBs Concentration[1] [ppm]
Full Core	Brick Wall (painted)	2-WC-1	3.6
Full Core	Brick wall (painted)	2-WC-2	26.4
Second Floor - Across Sections			
Scrape	Composite	2-DD-2	**300.0**
Third Floor - Eastern Section			
Full Core	Wood floor (stained)	3-FC-1	**86.0**
Full Core	Brick wall (stained)	3-WC-1	2.48
Full Core	Wood floor (stained)	3-FC-2	**204.0**
Scrape	Composite	3-DD-1	**1,170.0**
Scrape	Composite	3-DD-2	**470.0**

NOTES:

1. [1] - Concentrations are given for total PCBs in parts per million (ppm).
2. < - Indicates the compound was analyzed for but not detected. The associated value is the laboratory detection limit.
3. Values in bold exceed 50 ppm.

Table 2

Aerovox, Inc. Facility
New Bedford, Massachusetts

PCB Analytical Results
Wipe Samples

Surface Material	Sample I.D.	PCBs Concentration[1] [ug/100cm²]
First Floor - Eastern Section		
Concrete floor (painted)	1-FW-1	**18.0**
Top of electrical duct. Horizontal steel surface (painted).	1-AW-2	**20.8**
Concrete floor (painted)	1-FW-3	**350.0**
Brick wall (painted)	1-WW-4	**15.4**
Concrete floor (painted)	1-FW-5	**59.0**
Top of start/stop panel of air compressor. Horizontal metal surface (painted).	1-EW-1	**66.0**
Top of horizontal metal plate (painted).	1-EW-2	**330.0**
Side of drying oven # 4. Horizontal metal surface (painted).	1-EW-3	**13.7**
Side of rear base leg of federal press. Horizontal metal surface (painted).	1-EW-4	**199.0**
First Floor - Western Section		
Wood column (painted). Vertical surface.	1-AW-6	**10.5**
Elevated light fixture. Horizontal steel surface (painted).	1-AW-7	**84.0**
Inside left door of despatch oven. Vertical metal surface (unpainted).	1-EW-5	<2.5
"I" beam. Horizontal painted steel surface (pre-clean)	1-PSW-1	**520.0**
"I" beam. Horizontal painted steel surface (post-clean: vacuumed).	1-PSW-1A	**226.0**
Second Floor - Eastern Section		
Wood floor	2-FW-4	**17.8**
Tile floor	2-FW-5	**14.8**
Tile floor	2-FW-6	**14.6**
Tile floor	2-FW-7	3.3
Top of stainless steel horizontal surface.	2-EW-2	**217.0**
Top of machine housing. Horizontal metal surface (painted).	2-EW-3	2.5

Table 2

Aerovox, Inc. Facility
New Bedford, Massachusetts

PCB Analytical Results
Wipe Samples

Surface Material	Sample I.D.	PCBs Concentration[(1)] [ug/100cm^2]
Horizontal diamond steel plate (pre-clean).	2-PSW-1	**163.0**
Horizontal diamond steel plate (post-clean: washed)	2-PSW-1A	**34.0**
Second Floor - Western Section		
Top of electrical box. Horizontal steel surface (painted).	2-AW-2	**235.0**
Wood floor (painted)	2-FW-3	**90.0**
Top of electrical box. Horizontal steel surface (painted).	2-AW-1	**320.0**
Base of press. Horizontal metal surface (painted).	2-EW-1	**16.0**
Third Floor - Eastern Section		
Tile floor	3-FW-1	**22.6**
Tile floor	3-FW-2	**176.0**
Tile floor	3-FW-3	**98.0**
Tile floor	3-FW-4	**30.0**
Top of assembly machine. Horizontal metal surface (painted).	3-EW-1	**15.2**
Top of gear housing of lead welding machine. Horizontal metal surface (painted).	3-EW-2	**11.9**
Top shelf of domino ink jet. Horizontal metal surface (painted).	3-EW-3	**265.0**
Top of base unit of metal winder. Horizontal metal surface (painted).	3-EW-4	**68.0**
Top of test/sort machine. Horizontal metal surface (painted).	3-EW-5	<2.5

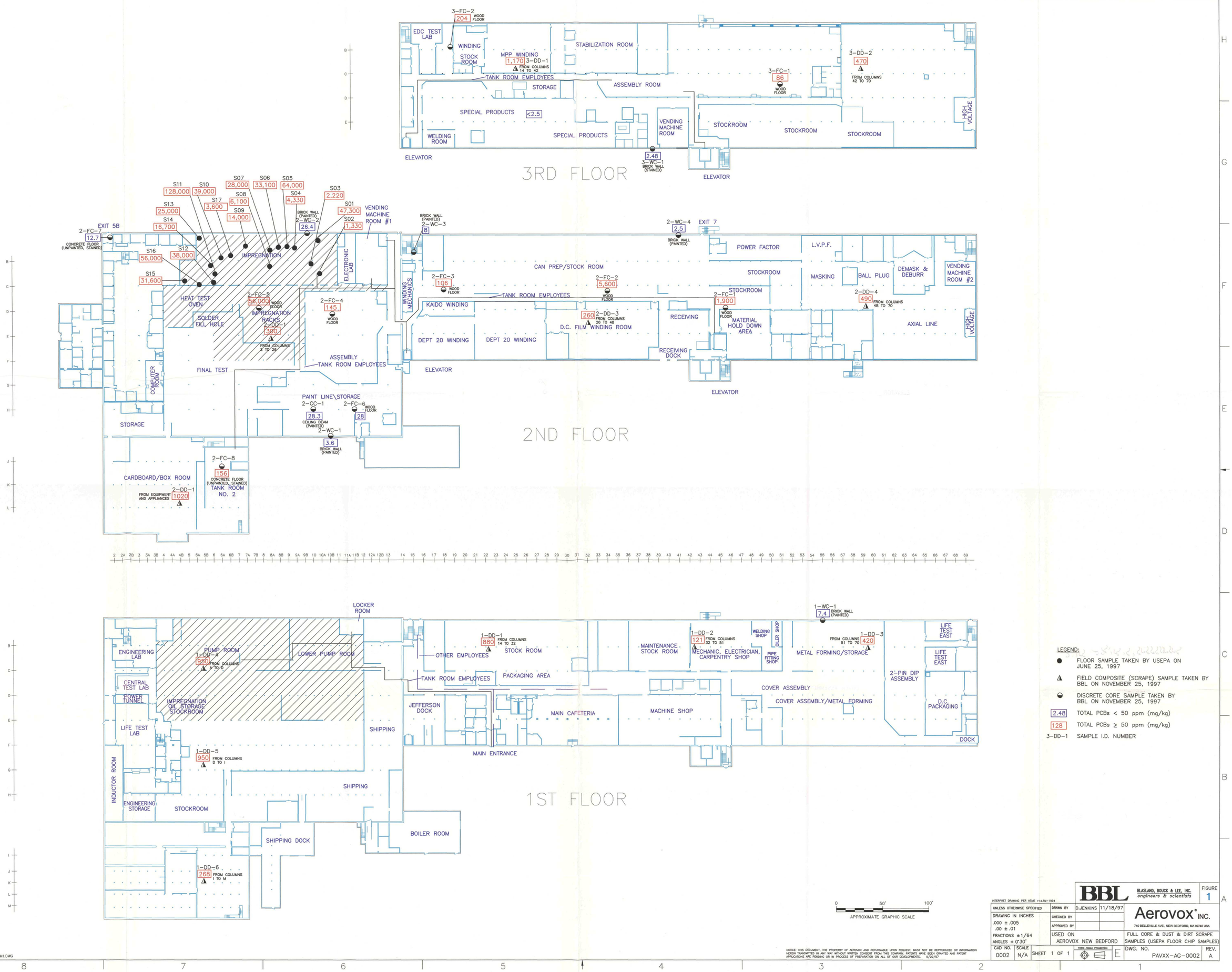
NOTES:

1. [(1)] - Concentrations are given for total PCBs in micrograms per 100 cm^2.
2. < - Indicates the compound was analyzed for but not detected. The associated value is the laboratory detection limit.
3. Values in bold exceed 10 ug/100 cm^2.

Figures

DWG. NO.	REV.
PAVXX-AG-0002	A

ZONE	LTR	REVISION	BY	DATE	APPR
–	A	ORIGINAL ISSUE	DAJ	11/18/97	



LEGEND:

- ● FLOOR SAMPLE TAKEN BY USEPA ON JUNE 25, 1997
- ▲ FIELD COMPOSITE (SCRAPE) SAMPLE TAKEN BY BBL ON NOVEMBER 25, 1997
- ◒ DISCRETE CORE SAMPLE TAKEN BY BBL ON NOVEMBER 25, 1997
- 2.48 TOTAL PCBs < 50 ppm (mg/kg)
- 128 TOTAL PCBs ≥ 50 ppm (mg/kg)
- 3-DD-1 SAMPLE I.D. NUMBER

0 50' 100'
APPROXIMATE GRAPHIC SCALE

INTERPRET DRAWING PER ASME Y14.5M-1994

UNLESS OTHERWISE SPECIFIED
DRAWING IN INCHES
.000 ± .005
.00 ± .01
FRACTIONS ± 1/64
ANGLES ± 0°30'

DRAWN BY	D.JENKINS	11/18/97
CHECKED BY		
APPROVED BY		

USED ON AEROVOX NEW BEDFORD

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 1

Aerovox® INC.
740 BELLEVILLE AVE., NEW BEDFORD, MA 02745 USA

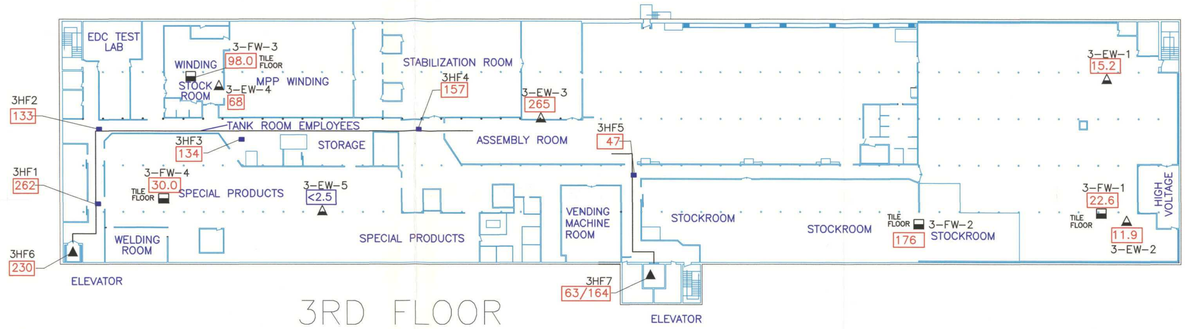
FULL CORE & DUST & DIRT SCRAPE SAMPLES (USEPA FLOOR CHIP SAMPLES)

CAD NO.	SCALE	SHEET	THIRD ANGLE PROJECTION	DWG. NO.	REV.
0002	N/A	1 OF 1	E	PAVXX-AG-0002	A

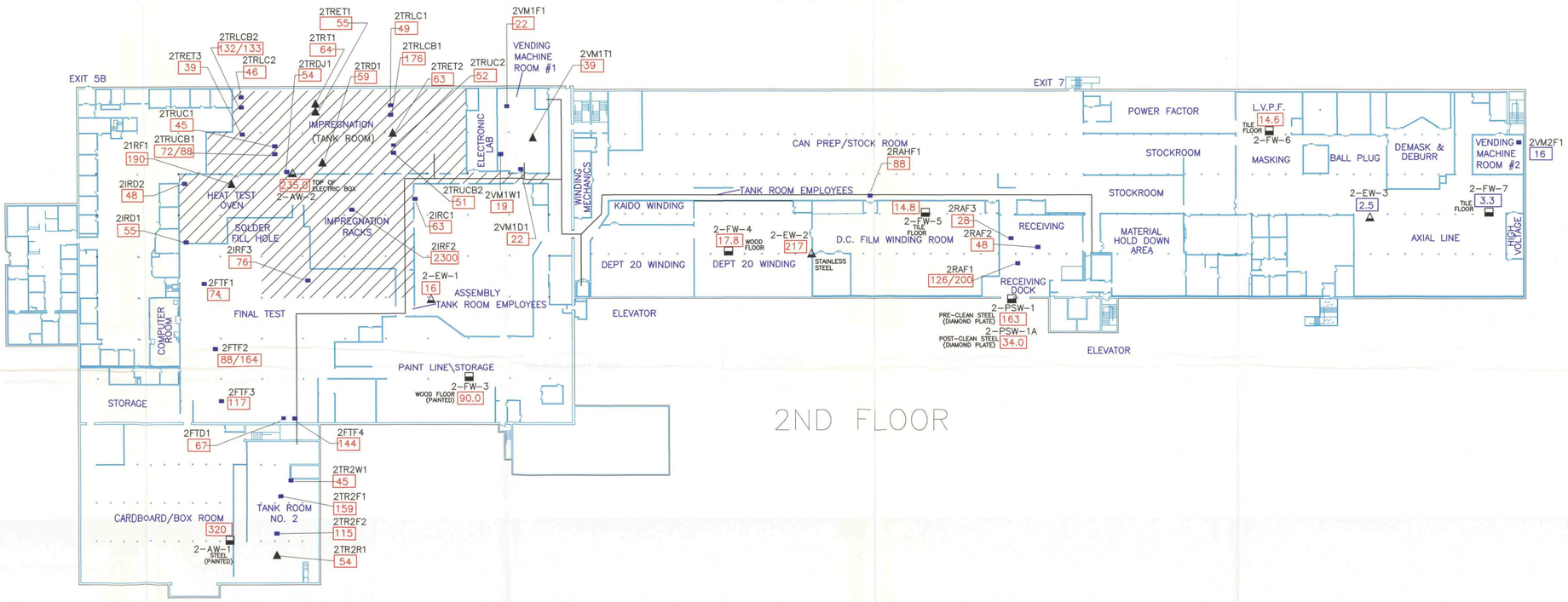
P: BBL2.PCP
2/12/98 SYR-54-PGL
03855001/AEROVOX/03855SM1.DWG

DWG. NO.	REV.
PAVXX-AG-0002	A

ZONE	LTR	REVISION	BY	DATE	APPR
–	A	ORIGINAL ISSUE	DAJ	11/18/97	



3RD FLOOR



2ND FLOOR

1ST FLOOR

LEGEND:

- ▲ APPURTENANCE WIPE SAMPLE TAKEN BY USEPA ON JUNE 25, 1997
- ■ BUILDING MATERIAL WIPE SAMPLE TAKEN BY USEPA ON JUNE 25, 1997
- △ EQUIPMENT/APPURTENANCE WIPE SAMPLE TAKEN BY BBL ON NOVEMBER 24, 1997
- ▬ BUILDING MATERIAL WIPE SAMPLE TAKEN BY BBL ON NOVEMBER 24, 1997
- 3.3 TOTAL PCBs < 10 ug/100 cm²
- 18.0 TOTAL PCBs ≥ 10 ug/100 cm²
- 1-AW-2 SAMPLE I.D. NUMBER

0 50' 100'
APPROXIMATE GRAPHIC SCALE

INTERPRET DRAWING PER ASME Y14.5M-1994.

UNLESS OTHERWISE SPECIFIED			
DRAWING IN INCHES .000 ± .005 .00 ± .01 FRACTIONS ±1/64 ANGLES ± 0°30'	DRAWN BY	DJENKINS	11/18/97
	CHECKED BY		
	APPROVED BY		
USED ON AEROVOX NEW BEDFORD			

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

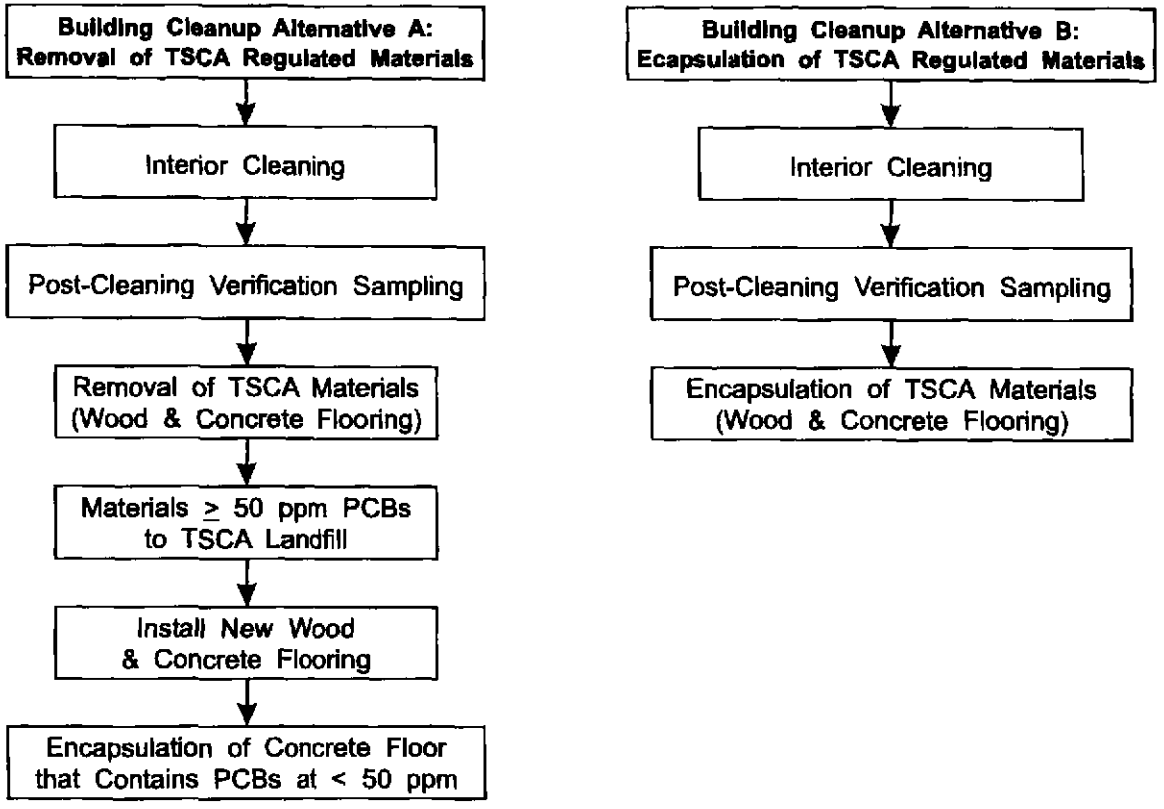
FIGURE 2

Aerovox® INC.
740 BELLEVILLE AVE., NEW BEDFORD, MA 02745 USA

TITLE WIPE SAMPLES

CAD NO.	SCALE	SHEET	THIRD ANGLE PROJECTION	DWG. NO.	REV.
0002	N/A	1 OF 1		PAVXX-AG-0002	A

P:BBL2.PCP
2/12/98 SYR-54-PGL
03855001/AEROVOX/03855SM2.DWG



AEROVOX INC. FACILITY
NEW BEDFORD, MASSACHUSETTS

COMPARISON OF BUILDING CLEAN UP ALTERNATIVES

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 3

12/97 SYR-D54-DJH
03855001/03855F01.CDR

Appendix A - Analytical Data Report

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

PESTICIDE ANALYTICAL REPORT

Galson Laboratories

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-1	L40282-2	L40282-3
Client ID:	1-FW-1	1-AW-2	1-FW-3
Aroclor-1016	<2.5	<2.5	<25
Aroclor-1221	<2.5	<2.5	<25
Aroclor-1232	<2.5	<2.5	<25
Aroclor-1242	<2.5	<2.5	<25
Aroclor-1248	7.0	8.8	130
Aroclor-1254	11.	12.	220
Aroclor-1260	<2.5	<2.5	<25
Analysis Date	12/02/97	12/02/97	12/03/97
Dilution Factor	1	1	10
Surrogate Recovery	100 %	109 %	0 % D
Control Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : JO
Date : 12-9-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-4	L40282-5	L40282-6
Client ID:	1-WW-4	1-FW-5	1-AW-6
Aroclor-1016	<2.5	<2.5	<2.5
Aroclor-1221	<2.5	<2.5	<2.5
Aroclor-1232	<2.5	<2.5	<2.5
Aroclor-1242	<2.5	<2.5	<2.5
Aroclor-1248	7.5	21.	6.4
Aroclor-1254	7.9	38.	4.1
Aroclor-1260	<2.5	<2.5	<2.5
Analysis Date	12/02/97	12/02/97	12/02/97
Dilution Factor	1	1	1
Surrogate Recovery	102 %	93 %	100 %
Control Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-8-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-7	L40282-8	L40282-9
Client ID:	1-AW-7	2-AW-2	2-FW-3
r clor-1016	<5	<25	<2.5
Aroclor-1221	<5	<25	<2.5
Aroclor-1232	<5	<25	<2.5
r clor-1242	<5	<25	<2.5
nclor-1248	47.	150	51.
Aroclor-1254	37.	85.	39.
roclor-1260	<5	<25	<2.5
nalysis Date	12/03/97	12/03/97	12/02/97
Dilution Factor	2	10	1
rogate Recovery	114 %	0 % D	113 %
ontrol Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : BP
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-10	L40282-11	L40282-12
Client ID:	2-FW-4	2-FW-5	2-FW-6
Aroclor-1016	<2.5	<2.5	<2.5
Aroclor-1221	<2.5	<2.5	<2.5
Aroclor-1232	<2.5	<2.5	<2.5
Aroclor-1242	<2.5	<2.5	<2.5
Aroclor-1248	8.3	10.	7.6
Aroclor-1254	9.5	4.8	7.0
Aroclor-1260	<2.5	<2.5	<2.5
Analysis Date	12/02/97	12/03/97	12/02/97
Dilution Factor	1	1	1
Surrogate Recovery	111 %	112 %	111 %
Control Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-13	L40282-14	L40282-15
Client ID:	2-FW-7	2-AW-1	3-FW-1
Aroclor-1016	<2.5	<25	<2.5
Aroclor-1221	<2.5	<25	<2.5
Aroclor-1232	<2.5	<25	<2.5
Aroclor-1242	<2.5	<25	<2.5
Aroclor-1248	3.3	170	14.
Aroclor-1254	<2.5	150	8.6
Aroclor-1260	<2.5	<25	<2.5
Analysis Date	12/03/97	12/03/97	12/03/97
Dilution Factor	1	10	1
Surrogate Recovery	111 %	0 % D	112 %
Control Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-9-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-16	L40282-17	L40282-18
Client ID:	3-FW-2	3-FW-3	3-FW-4
Aroclor-1016	<25	<5	<2.5
Aroclor-1221	<25	<5	<2.5
Aroclor-1232	<25	<5	<2.5
Aroclor-1242	<25	<5	<2.5
Aroclor-1248	100	60.	19.
Aroclor-1254	76.	38.	11.
Aroclor-1260	<25	<5	<2.5
Analysis Date	12/03/97	12/03/97	12/03/97
Dilution Factor	10	2	1
Surrogate Recovery	0 % D	118 %	108 %
Control Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [signature]
Date : 12-9-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-25	L40282-26	L40282-27
Client ID:	2-EW-1	2-EW-2	2-EW-3
Aroclor-1016	<2.5	<25	<2.5
Aroclor-1221	<2.5	<25	<2.5
Aroclor-1232	<2.5	<25	<2.5
Aroclor-1242	<2.5	<25	<2.5
Aroclor-1248	12.	87.	2.5
Aroclor-1254	4.0	130	<2.5
Aroclor-1260	<2.5	<25	<2.5
Analysis Date	12/03/97	12/03/97	12/02/97
Dilution Factor	1	10	1
Surrogate Recovery	101 %	0 % D	103 %
Control Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-3-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-28	L40282-29	L40282-30
Client ID:	3-EW-1	3-EW-2	3-EW-3
Aroclor-1016	<2.5	<2.5	<12
Aroclor-1221	<2.5	<2.5	<12
Aroclor-1232	<2.5	<2.5	<12
Aroclor-1242	<2.5	<2.5	<12
Aroclor-1248	8.1	6.4	180
Aroclor-1254	7.1	5.5	85.
Aroclor-1260	<2.5	<2.5	<12
Analysis Date	12/02/97	12/02/97	12/02/97
Dilution Factor	1	1	5
Surrogate Recovery	120 %	110 %	108 %
Control Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : BSO
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-31	L40282-32	L40282-33
Client ID:	3-EW-4	3-EW-5	1-EW-1
[illegible]lor-1016	<2.5	<2.5	<2.5
Aroclor-1221	<2.5	<2.5	<2.5
Aroclor-1232	<2.5	<2.5	<2.5
[illegible] lor-1242	<2.5	<2.5	<2.5
[illegible]lor-1248	46.	<2.5	38.
Aroclor-1254	22.	<2.5	28.
Aroclor-1260	<2.5	<2.5	<2.5
Analysis Date	12/02/97	12/02/97	12/02/97
Dilution Factor	1	1	1
Surrogate Recovery	97 %	92 %	102 %
Control Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40282-34	L40282-35	L40282-36
Client ID:	1-EW-2	1-EW-3	1-EW-4
Aroclor-1016	<50	<2.5	<12
Aroclor-1221	<50	<2.5	<12
Aroclor-1232	<50	<2.5	<12
Aroclor-1242	<50	<2.5	<12
Aroclor-1248	210	7.0	89.
Aroclor-1254	120	6.7	110
Aroclor-1260	<50	<2.5	<12
Analysis Date	12/02/97	12/02/97	12/02/97
Dilution Factor	20	1	5
Surrogate Recovery	0 % D	99 %	100 %
Control Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : 12-4-97
Date :
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	Q-5147	Q-5148
Client ID:	PBLK 5147	PBLK 5148
Aroclor-1016	<2.5	<2.5
Aroclor-1221	<2.5	<2.5
Aroclor-1232	<2.5	<2.5
Aroclor-1242	<2.5	<2.5
Aroclor-1248	<2.5	<2.5
Aroclor-1254	<2.5	<2.5
Aroclor-1260	<2.5	<2.5
Analysis Date	12/02/97	12/02/97
Dilution Factor	1	1
Surrogate Recovery	112 %	113 %
Control Limits (46-137)		

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 19:31 Report Reference # : 94525

PESTICIDE ANALYTICAL REPORT

Galson Laboratories

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40282-19	L40282-20	L40282-21
Client ID:	2-FC-1	2-FC-2	2-FC-3
Aroclor-1016	<350	<690	<3.5
Aroclor-1221	<350	<690	<3.5
Aroclor-1232	<350	<690	<3.5
Aroclor-1242	1900	<690	<3.5
Aroclor-1248	<350	2300	64.
Aroclor-1254	<350	3300	42.
Aroclor-1260	<350	<690	<3.5
Analysis Date	12/03/97	12/03/97	12/02/97
Dilution Factor	10000	20000	100
Surrogate Recovery	0 % D	0 % D	0 % D
Control Limits (60-150)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : BR
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 19:32 Report Reference # : 94538

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40282-22	L40282-23	L40282-24
Client ID:	2-FC-4	2-FC-5	2-FC-6
Aroclor-1016	<7.1	<4000	<1.7
Aroclor-1221	<7.1	<4000	<1.7
Aroclor-1232	<7.1	<4000	<1.7
Aroclor-1242	<7.1	56000	<1.7
Aroclor-1248	91.	<4000	18.
Aroclor-1254	54.	<4000	10.
Aroclor-1260	<7.1	<4000	<1.7
Analysis Date	12/03/97	12/03/97	12/03/97
Dilution Factor	200	100000	50
Surrogate Recovery	0 % D	0 % D	0 % D
Control Limits (60-150)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 19:32 Report Reference # : 94538

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40282-37	L40282-38	L40282-39
Client ID:	3-FC-1	3-WC-1	3-FC-2
Aroclor-1016	<7.2	<0.17	<36
Aroclor-1221	<7.2	<0.17	<36
Aroclor-1232	<7.2	<0.17	<36
Aroclor-1242	<7.2	<0.17	<36
Aroclor-1248	58.	1.5	140
Aroclor-1254	28.	0.98	64.
Aroclor-1260	<7.2	<0.17	<36
Analysis Date	12/03/97	12/02/97	12/02/97
Dilution Factor	200	10	1000
Surrogate Recovery Control Limits (60-150)	0 % D	0 % D	0 % D

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : SP
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 19:32 Report Reference # : 94538

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40282-40	L40282-41	L40282-42
Client ID:	3-DD-1	3-DD-2	2-CC-1
Aroclor-1016	<34	<50	<5.1
Aroclor-1221	<34	<50	<5.1
Aroclor-1232	<34	<50	<5.1
Aroclor-1242	<34	<50	<5.1
Aroclor-1248	500	230	20.
Aroclor-1254	670	240	8.3
Aroclor-1260	<34	<50	<5.1
Analysis Date	12/02/97	12/02/97	12/02/97
Dilution Factor	1000	1000	100
Surrogate Recovery	0 % D	0 % D	0 % D
Control Limits (60-150)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 19:32 Report Reference # : 94538

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40282-43	L40282-44	L40282-45
Client ID:	2-FC-7	2-FC-8	2-DD-1
Aroclor-1016	<1.7	<17	<34
Aroclor-1221	<1.7	<17	<34
Aroclor-1232	<1.7	<17	<34
Aroclor-1242	<1.7	<17	<34
Aroclor-1248	3.0	120	530
Aroclor-1254	<1.7	36.	490
Aroclor-1260	9.7	<17	<34
Analysis Date	12/02/97	12/02/97	12/02/97
Dilution Factor	100	1000	1000
Surrogate Recovery	0 % D	0 % D	0 % D
Control Limits (60-150)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : BR
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 19:32 Report Reference # : 94538

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40282-46	L40282-47	L40282-48
Client ID:	2-WC-1	2-WC-2	2-WC-3
Aroclor-1016	<1.7	<1.7	<1.7
Aroclor-1221	<1.7	<1.7	<1.7
Aroclor-1232	<1.7	<1.7	<1.7
Aroclor-1242	<1.7	<1.7	<1.7
Aroclor-1248	3.6	19.	4.3
Aroclor-1254	<1.7	7.4	3.7
Aroclor-1260	<1.7	<1.7	<1.7
Analysis Date	12/03/97	12/03/97	12/03/97
Dilution Factor	100	100	100
Surrogate Recovery Control Limits (60-150)	0 % D	0 % D	0 % D

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 19:32 Report Reference # : 94538

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40282-49	L40282-50	L40282-51
Client ID:	2-WC-4	2-DD-2	2-DD-3
Aroclor-1016	<0.17	<51	<8.4
Aroclor-1221	<0.17	<51	<8.4
Aroclor-1232	<0.17	<51	<8.4
Aroclor-1242	<0.17	<51	<8.4
Aroclor-1248	1.4	160	150
Aroclor-1254	1.1	140	110
Aroclor-1260	<0.17	<51	<8.4
Analysis Date	12/03/97	12/03/97	12/03/97
Dilution Factor	10	1000	100
Surrogate Recovery	0 % D	0 % D	0 % D
Control Limits (60-150)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : BC
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 19:32 Report Reference # : 94538

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 24-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40282-52	Q-5145	Q-5146
Client ID:	2-DD-4	PBLK 5145	PBLK 5146
Aroclor-1016	<33	<0.02	<0.02
Aroclor-1221	<33	<0.02	<0.02
Aroclor-1232	<33	<0.02	<0.02
Aroclor-1242	<33	<0.02	<0.02
Aroclor-1248	150	<0.02	<0.02
Aroclor-1254	<33	<0.02	<0.02
Aroclor-1260	340	<0.02	<0.02
Analysis Date	12/03/97	12/02/97	12/03/97
Dilution Factor	1000	1	1
Surrogate Recovery	0 % D	98 %	89 %
Control Limits (60-150)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-4-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 19:32 Report Reference # : 94538

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

1 of 4

CHAIN OF CUSTODY RECORD

PROJ. NO. 97.00.01 | PROJECT NAME: AEROUOX SAMPLING PROGRAM

SAMPLERS: (Signature) Bruce Erlewein

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	PCBs	
	11-24-97	16:00		X	1-FW-1	1	X	Blasland, Bouck & Lee L40282-1 1-FW-1 11/26/97 Wipe
	11-24-97	16:05		X	1-AW-2	1	X	Lee L40282-2 1-AW-2
	11-24-97	16:10		X	1-FW-3	1	X	Lee L40282-3 1-FW-3
	11-24-97	16:15		X	1-WW-4	1	X	ee L40282-4 1-WW-4
	11-24-97	16:20		X	1-FW-5	1	X	e L40282-5 1-FW-5
	11-24-97	16:25		X	1-AW-6	1	X	Lee L40282-6 1-AW-6
	11-24-97	16:30		X	1-AW-7	1		ee L40282-7 1-AW-7
	11-24-97	17:05		X	2-AW-2	1	X	ee L40282-8 2-AW-2
	11-24-97	17:30		X	2-FW-3	1	X	Lee L40282-9 2-FW-3
	11-24-97	17:40		X	2-FW-4	1	X	ee L40282-10 2-FW-4
	11-24-97	17:50		X	2-FW-5	1	X	Lee L40282-11 2-FW-5
	11-24-97	17:55		X	2-FW-6	1	X	ee L40282-12
	11-24-97	18:05		X	2-FW-7	1	X	ee L40282-13
	11/24/97	1635		X	2-AW-1	1	X	Lee L40282-14 2-AW-1

ASAP TURNAROUND

of

lower temp 56°F TS (TF)

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinqu	DATE	TIME	Relinquished by: (Signature)
	11/25/97	1600					
Relinquished by: (Signature)	**DATE**	**TIME**	**Received by:** (Signature)	**Relinquished by:** (Signature)	**DATE**	**TIME**	**Relinquished by:** (Signature)
Relinquished by: (Signature)	**DATE**	**TIME**	**Received for Laboratory by:** (Signature)	**DATE** 11-26-97	**TIME** 1030	**Remarks:** SENT TO GALSON LABORATORY FED EX # 609 468 3491	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

EBL
ELASLAND, BOUCK & LEE, INC.
engineers & scientists
6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO. 977.00.01 | PROJECT NAME: AEROVOX SAMPLING PROGRAM

SAMPLERS: (Signature) Bruce Eriksen

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	PCBs		REMARKS
	11-24-97	18:20		X	3-FW-1	1	X	L40282-15	ASAP TURNAROUND
	11-24-97	18:30		X	3-FW-2	1	X	L40282-16	
	11-24-97	18:40		X	3-FW-3	1	X	L40282-17	
	11-24-97	18:50		X	3-FW-4	1	X	L40282-18	
		1445		X	2-FC-1	1	X	L40282-19	
		1500		X	2-FC-2	1	X	L40282-20	2 DF 56 TS (TC)
		1510		X	2-FC-3	1	X	L40282-21	
		1545		X	2-FC-4	1	X	L40282-22	
		1555		X	2-FC-5	1	X	L40282-23	
		1610		X	2-FC-6	1	X	L40282-24	
		1735		X	2-EW-1	1	X	L40282-25	
		1745		X	2-EW-2	1	X	L40282-26	
		1800		X	2-EW-3	1	X	L40282-27	
		1810		X	3-EW-1	1	X	L40282-28	

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
	11/25/97	1600					
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE: 11-26-97	TIME: 1050	Remarks: SENT TO CALSON LABORATORY FED EX# 609 468 0491	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

BLASLAND, BOUCK & LEE, INC.
engineers & scientists
6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO. 917.03.01 | PROJECT NAME: AEROVOX SAMPLING PROGRAM

SAMPLERS: (Signature) JAMES J. HASSETT III

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	PCB's		REMARKS
	11/24/97	1815		X	3-EW-2	1	X	Lee 3-EW-2 L40282-29	P TURNAROUND
		1825		X	3-EW-3	1	X	ee 3-EW-3 L40282-30	
		1835		X	3-EW-4	1	X	ee 3-EW-4 L40282-31	
		1845		X	3-EW-5	1	X	Lee 3-EW-5 L40282-32	
		1855		X	1-EW-1	1	X	3e L40282-33 1-EW-1	56°F cooler temp. 5.6°C TS
		1900		X	1-EW-2	1	X	ee 1-EW-2 L40282-34	
		1905		X	1-EW-3	1	X	ee L40282-35	
		1910		X	1-EW-4	1	X	ee 1-EW-4 L40282-36	
	11/25/97	0835		X	3-FC-1	1	X	ee 3-FC-1 L40282-37	
		0855		X	3-WC-1	1	X	Lee 3-WC-1 L40282-38	
		0910		X	3-FC-2	1	X	ee 3-FC-2 L40282-39	
		0915		X	3-DD-1	1	X	ee 3-DD-1 L40282-40	
		0945		X	3-DD-2	1	X	ee 3-DD-2 L40282-41	
		1030		X	2-CC-1	1	X	ee 2-CC-1 L40282-42	

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
	11/25/97	1600					
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE	TIME	Remarks:	
				11-26-97	1050	SENT TO GAESON LABORATORY FED EX # 609468 0491	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists
6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO. 9711.00.01 | PROJECT NAME: AEROVOX SAMPLING PROGRAM

SAMPLERS: (Signature) JAMES J. HASSETT III

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	PCBs		REMARKS
	11/24/97	1050		X	2-FC-7	1	X	L40282-43	SAP TURNAROUND
		1105		X	2-FC-8	1	X	L40282-44	
		1145		X	2-DD-1	1	X	L40282-45	
		1210		X	2-WC-1	1	X	L40282-46	
		1245		X	2-WC-2	1	X	L40282-47	
		1255		X	2-WC-3	1	X	L40282-48	Cooler Temp 56°F TS TB
		1305		X	2-WC-4	1	X	L40282-49	
		1335		X	2-DD-2	1	X	L40282-50	
		1330		X	2-DD-3	1	X	L40282-51	
		1320		X	2-DD-4	1	X	L40282-52	

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
	11/25/97	1600					
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE: 11-26-97	TIME: 1050	Remarks: SENT TO GALSON LABORATORY FED EX # 609468 0491	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

PESTICIDE ANALYTICAL REPORT

Galson Laboratories

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 25-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40298-1	L40298-2	L40298-3
Client ID:	2-PSW-1	2-PSW-1A	1-EW-5
r clor-1016	<12	<2.5	<2.5
r clor-1221	<12	<2.5	<2.5
Aroclor-1232	<12	<2.5	<2.5
Aroclor-1242	<12	<2.5	<2.5
r clor-1248	73.	15.	<2.5
r clor-1254	90.	19.	<2.5
Aroclor-1260	<12	<2.5	<2.5
n lysis Date	12/02/97	12/02/97	12/02/97
Dilution Factor	5	1	1
Surrogate Recovery	114 %	101 %	101 %
ontrol Limits (46-137)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : SB
Date : 12.3.97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 15:07 Report Reference # : 94526

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 25-NOV-97
Date Extracted: 01-DEC-97

Matrix : Wipe
Method : SW846 8082
Units : ug

Galson ID:	L40298-4	L40298-5	Q-5148
Client ID:	1-PWS-1	1-PWS-1A	PBLK 5148
Aroclor-1016	<25	<25	<2.5
Aroclor-1221	<25	<25	<2.5
Aroclor-1232	<25	<25	<2.5
Aroclor-1242	<25	<25	<2.5
Aroclor-1248	300	130	<2.5
Aroclor-1254	220	96.	<2.5
Aroclor-1260	<25	<25	<2.5
Analysis Date	12/02/97	12/02/97	12/02/97
Dilution Factor	10	10	1
Surrogate Recovery Control Limits (46-137)	0 % D	0 % D	113 %

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [signature]
Date : 12-3-97
NYS DOH # : 11626
Footnotes:
D: Surrogate diluted out.

Printed : 12/03/97 15:07 Report Reference # : 94526

PESTICIDE ANALYTICAL REPORT

Galson Laboratories

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 25-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40298-6	L40298-7	L40298-8
Client ID:	1-WG-1	1-DD-1	1-DD-2
r clor-1016	<1.7	<85	<3.3
r clor-1221	<1.7	<85	<3.3
Aroclor-1232	<1.7	<85	<3.3
Aroclor-1242	<1.7	<85	<3.3
r clor-1248	2.9	620	55.
r clor-1254	4.5	260	66.
Aroclor-1260	<1.7	<85	<3.3
r lysis Date	12/03/97	12/03/97	12/03/97
ution Factor	100	1000	100
Surrogate Recovery	0 % D	0 % D	0 % D
ontrol Limits (60-150)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-3-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 16:25 Report Reference # : 94534

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 25-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40298-9	L40298-10	L40298-11
Client ID:	1-DD-3	1-DD-4	1-DD-5
Aroclor-1016	<17	<170	<84
Aroclor-1221	<17	<170	<84
Aroclor-1232	<17	<170	<84
Aroclor-1242	<17	<170	<84
Aroclor-1248	180	1300	600
Aroclor-1254	240	710	350
Aroclor-1260	<17	<170	<84
Analysis Date	12/03/97	12/03/97	12/03/97
Dilution Factor	1000	10000	5000
Surrogate Recovery	0 % D	0 % D	0 % D
Control Limits (60-150)			

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-3-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 16:25 Report Reference # : 94534

Galson Laboratories

PESTICIDE ANALYTICAL REPORT

Client : Blasland, Bouck & Lee
Account # : 10624
Site : Aerovox Sampling Program

Date Received : 26-NOV-97
Date Sampled : 25-NOV-97
Date Extracted: 28-NOV-97

Matrix : Bulk
Method : SW846-8082
Units : mg/Kg

Galson ID:	L40298-12	Q-5146
Client ID:	1-DD-6	PBLK 5146
Aroclor-1016	<34	<0.02
Aroclor-1221	<34	<0.02
Aroclor-1232	<34	<0.02
Aroclor-1242	<34	<0.02
Aroclor-1248	180	<0.02
Aroclor-1254	88.	<0.02
Aroclor-1260	<34	<0.02
Analysis Date	12/03/97	12/03/97
Dilution Factor	2000	1
Surrogate Recovery Control Limits (60-150)	0 % D	89 %

Approved by : Oommen Kappil
Date : 03-DEC-97
QC by : [illegible]
Date : 12-3-97
NYS DOH # : 11626
Footnotes:
Results are reported on a dry weight basis.
See enclosed sheet for percent moisture values.
D: Surrogate diluted out.

Printed : 12/03/97 16:25 Report Reference # : 94534

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists
6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

1 of 1

CHAIN OF CUSTODY

0338.55.001

PROJ. NO. 0338.55.01 | PROJECT NAME: AEROVOX SAMPLING PROGRAM

SAMPLERS: (Signature) JAMES J. HASSETT III

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Blasland, Bouck & Lee 11/26/97 Wipe Number of Containers	PCBs	REMARKS
	11/26/97	1435		X	2-PSW-1	1	X	*ASAP TURNAROUND*
		1440		X	2-PSW-1A	1	X	Blasland, Bouck & Lee L40276-2
		1515		X	1-EW-5	1	X	Blasland, Bouck & Lee L40276-3
		1540		X	1-PSW-1	1	X	Blasland, Bouck & Lee L40276-4
		1545		X	1-PSW-1A	1	X	Blasland, Bouck & Lee L40276-5
		1600		X	1-WC-1	1	X	Blasland, Bouck & Lee L40276-6
		1645		X	1-DD-1	1	X	Blasland, Bouck & Lee L40276-7
		1630		X	1-DD-2	1	X	Blasland, Bouck & Lee L40276-8
		1615		X	1-DD-3	1	X	Blasland, Bouck & Lee L40276-9
		1730		X	1-DD-4	1	X	Blasland, Bouck & Lee L40276-10
		1715		X	1-DD-5	1	X	Blasland, Bouck & Lee L40276-11
		1700		X	1-DD-6	1	X	Blasland, Bouck & Lee L40276-12 11/26/97 Bulk

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
	11/26/97	1130			11/26/97	15:30	
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE: 11-26-97	TIME: 1530	Remarks: DELIVERED TO GALSON LABORATORY BY A BBL REPRESENTATIVE	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files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